

Table 1

Phase Change Material	Transition Temperature		Latent Heat (Btu/lbm)	NOTES
	°F	°C		
Glycerol	64.8	18.2	86.3	non-paraffin organic
Acetic Acid	62	16.7	82.6	non-paraffin organic
Polyethylene Glycol 600	68-77		63	non-paraffin organic
Camphene	50	10	102	non-paraffin organic
Oxasoline Wax	122	50		non-paraffin organic
d-Lactic Acid	79	26.1	79	non-paraffin organic
formic acid	47	8.3	118	organic
acrylic acid	54	12.2	66.7	organic
p-Xylene	56	13.3	68.1	organic
caprylic acid	61	16.1	63.7	organic
Jojoba Wax	52-53.2	11.2-11.8		insoluble fatty acids of natural oils and waxes
Cotton Seed Oil	94.1	34.5		insoluble fatty acids of natural oils and waxes
Coconut	77	25		insoluble fatty acids of natural oils and waxes
Almond	56.3	13.5		insoluble fatty acids of natural oils and waxes
Beechnut	74.3	23.5		insoluble fatty acids of natural oils and waxes
Black Mustard	61.7	16.5		insoluble fatty acids of natural oils and waxes
Candlenut	68.9	20.5		insoluble fatty acids of natural oils and waxes
Castor Oil	55.4	13		insoluble fatty acids of natural oils and waxes
Corn Oil	65.3	18.5		insoluble fatty acids of natural oils and waxes
Cotton Seed Stearin	83.3	28.5		insoluble fatty acids of natural oils and waxes
Esparto	63.5	17.5		insoluble fatty acids of natural oils and waxes
Poppy Seed	68.9	20.5		insoluble fatty acids of natural oils and waxes
Rape Seed (Canola)	66.2	19		insoluble fatty acids of natural oils and waxes
Pumpkin Seed	136.4	58		insoluble fatty acids of natural oils and waxes
Soy Bean	80.6	27		insoluble fatty acids of natural oils and waxes
Sunflower	73.4	23		insoluble fatty acids of natural oils and waxes
Walnut	57.74	14.3		insoluble fatty acids of natural oils and waxes
White Mustard Seed	59.9	15.5		insoluble fatty acids of natural oils and waxes
Beeswax	143	62	76	insoluble fatty acids of natural oils and waxes
NH4Cl•Na2SO4•10H2O	52	11.1	70	hydration-dehydration reaction
NaCl•NH4Cl•2NaSO4•20H2O	55	12.8	78	hydration-dehydration reaction
NaCl•Na2•SO4•10H2O	65	18.3	80	hydration-dehydration reaction
n-tetradecane	41.9	5.5	98	hydrocarbon paraffins
n-pentadecane	50	10	88	hydrocarbon paraffins
n-hexadecane	62.1	16.7	102	hydrocarbon paraffins
n-heptadecane	71.1	21.7	92	hydrocarbon paraffins
n-octadecane	82.4	28	105	hydrocarbon paraffins
n-nanodecane	89.6	32		hydrocarbon paraffins
n-eicosane	98.1	36.7	106	hydrocarbon paraffins
n-heneicosane	104.4	40.2	86	hydrocarbon paraffins
n-decosane	111.2	44	107	hydrocarbon paraffins
n-tricosane	117.5	47.5	100	hydrocarbon paraffins
Trimethylolethane	178	81		mesocrystalline phase change
Neopentyl Glycol		42		mesocrystalline phase change
lithium chloride				
calcium chloride hydrate				
1-decanol octadecane				
C-16 to C-22 alkyl hydrocarbons	10 to 50	> 50		alkyl hydrocarbon
natural rubber	varies to 25			crystalline phase change
polychloropropene	32			
Witco 45A		31	>54	crystalline alkyl hydrocarbons
Witco K-61		24	>54	crystalline alkyl hydrocarbons
Witco K-51		17	>54	crystalline alkyl hydrocarbons
Witco 85010-1		7	>54	crystalline alkyl hydrocarbons
pentaerythritol	plastic crystals (no change of state but release high amounts of E before melting)			
polyhydric alcohols	plastic crystals (no change of state but release high amounts of E before melting)			
acrylate and methacrylate polymers		-17.8		with C-16 to C-18 alkyl side chains
CaBr2•6H2O/NaCl	59	15		hydration-dehydration reaction
Na2SO4•10H2O/NaCl	64	17.8		hydration-dehydration reaction
CaCl2•6H2O	82	27.8		hydration-dehydration reaction
Na2SO4•10H2O	90	32.2		hydration-dehydration reaction
CaBr2•6H2O	93	33.9		hydration-dehydration reaction